

TECHNICAL EXHIBIT
MINOR CHANGE APPLICATION
FOR CONTRUCTION PERMIT
AM STATION KZZZ (FACILITY ID 8387)
BULLHEAD CITY, ARIZONA

AUGUST 8, 2006

1490 KHZ 1 KW-U ND-1

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Technical Narrative

This Technical Exhibit supports an application for construction permit for AM Class C station KZZZ, currently licensed on 1490 kilohertz (kHz) to Bullhead City, Arizona. By means of this application, the applicant proposes to change its transmitter site and increase the efficiency.

Proposed Transmitter Location

The proposed site is located 10.3 kilometers northwest of the licensed site. The proposed tower is an existing structure that was part of a former, three-tower, directional array for AM station KLSQ, facility id 36694 (formerly KROL). KZZZ proposed to use the former KROL tower #1 (west), which is registered with the FCC with the following geographic coordinates (NAD27):

35° 10' 08" North Latitude
114° 38' 16" West Longitude

The existing (former KROL) tower #2 (center) is currently utilized by television station KMCC. The existing (former KROL) tower #3 (east) is currently utilized by the non-directional operation for KFLG(AM).

The proposed KZZZ tower has an overall height of 87.5 meters (286 feet) and an electrical height of 152.7 degrees (85.3 meters).

Photographs of the transmitter site are shown in Figure 6. The existing ground system consists of 120 equally spaced copper wire radials about the tower. The radials extend 153 degrees, or 85.3 meters (280 feet) from the tower base, except where bonded to a 4 inch copper strap between tower number 2 (see tower #1 in Figure 1).

Blanketing

There is no population residing within the 1000 mV/m contour. Station KFLG is the only AM station within 5 kilometers of the proposed KZZZ site. Since KZZZ will be using an existing tower (no change in structure), no adverse impact to the KFLG operation is expected.

City Coverage Compliance

The proposed daytime field strength contours are depicted in Figure 3. As indicated, the proposed daytime 5 mV/m contour will completely encompass the city limits of Bullhead City. The 21.9 mV/m nighttime interference free (NIF) contour encompasses 87.1% of the population of Bullhead City. The Bullhead City limits were obtained from information contained in the TIGER 2000 U.S. Census files. FCC Figure M3, along with measured conductivity data shown in Figure 5 of this exhibit was used in determining the extent of coverage for all KZZZ contours.

Daytime Allocation Study

A daytime allocation study was made utilizing FCC Figure M-3 and the ground conductivity measurements shown in Figure 5. Daytime field strength contours were calculated in accordance with Section 73.183. Based on this analysis, the proposed facility will comply with all relevant allocation criteria. The stations of concern that are shown on the maps in Figure 4 are tabulated below:

KYCA, 1490 kHz, Prescott, AZ
NEW, 1490 kHz, St. George, UT
NEW, 1490 kHz, Santa Clara, UT
NEW, 1500 kHz, Winchester, NV

As tabulated below, the proposal will reduce the existing contour overlap with three other stations: KYCA, NEW (St. George, UT), NEW (Santa Clara, UT) and NEW (Winchester, NV).

	Overlap Received from KYCA	Overlap Caused to KYCA
Licensed KZZZ	None	110 sq km
Proposed KZZZ	None	109 sq km
Net Change	N/A	-1 sq km

	Overlap Received from St. George, UT	Overlap Caused to St. George, UT
Licensed KZZZ	None	171 sq km
Proposed KZZZ	None	None
Net Change	N/A	-171 sq km

	Overlap Received from Santa Clara, UT	Overlap Caused to Santa Clara, UT
Licensed KZZZ	None	37 sq km
Proposed KZZZ	None	None
Net Change	N/A	-37 sq km

	Overlap Received from Winchester, NV	Overlap Caused to Winchester, NV
Licensed KZZZ	2,303 sq km	1,955 sq km
Proposed KZZZ	251 sq km	142 sq km
Net Change	-2,052 sq km	-1,813 sq km

Per Section 73.182(a)(3), allocation studies with respect to other Class C stations were calculated as follows. The proposal (KZZZ) was calculated using 250 watts of power while all other Class C stations' interfering contours were calculated with that particular station operating at 250 watts (interference received), while their protected contours were calculated using their full licensed power (interference caused).

The proposed operation does not result in any prohibited contour overlap with any other station. The proposed 0.025 mV/m interfering contour does not enter into Mexico. Therefore, no Mexican allocation studies or coordination is required.

Field strength measurements to determine ground conductivity from the proposed site were made by Mr. Joe Sands during the months of June and July, 2006. The measurements were made on station KFLG(AM) (1000 kHz) which operates from a single

tower approximately 360 meters (1200 feet) east of the proposed KZZZ operation. The measurements were made using a Potomac Instruments FIM-41, serial no. 1242, last calibrated by Potomac Instruments on 09/26/2005. The results of these measurements are tabulated in Figure 5.

Ground Level Radiofrequency Electromagnetic Field Exposure

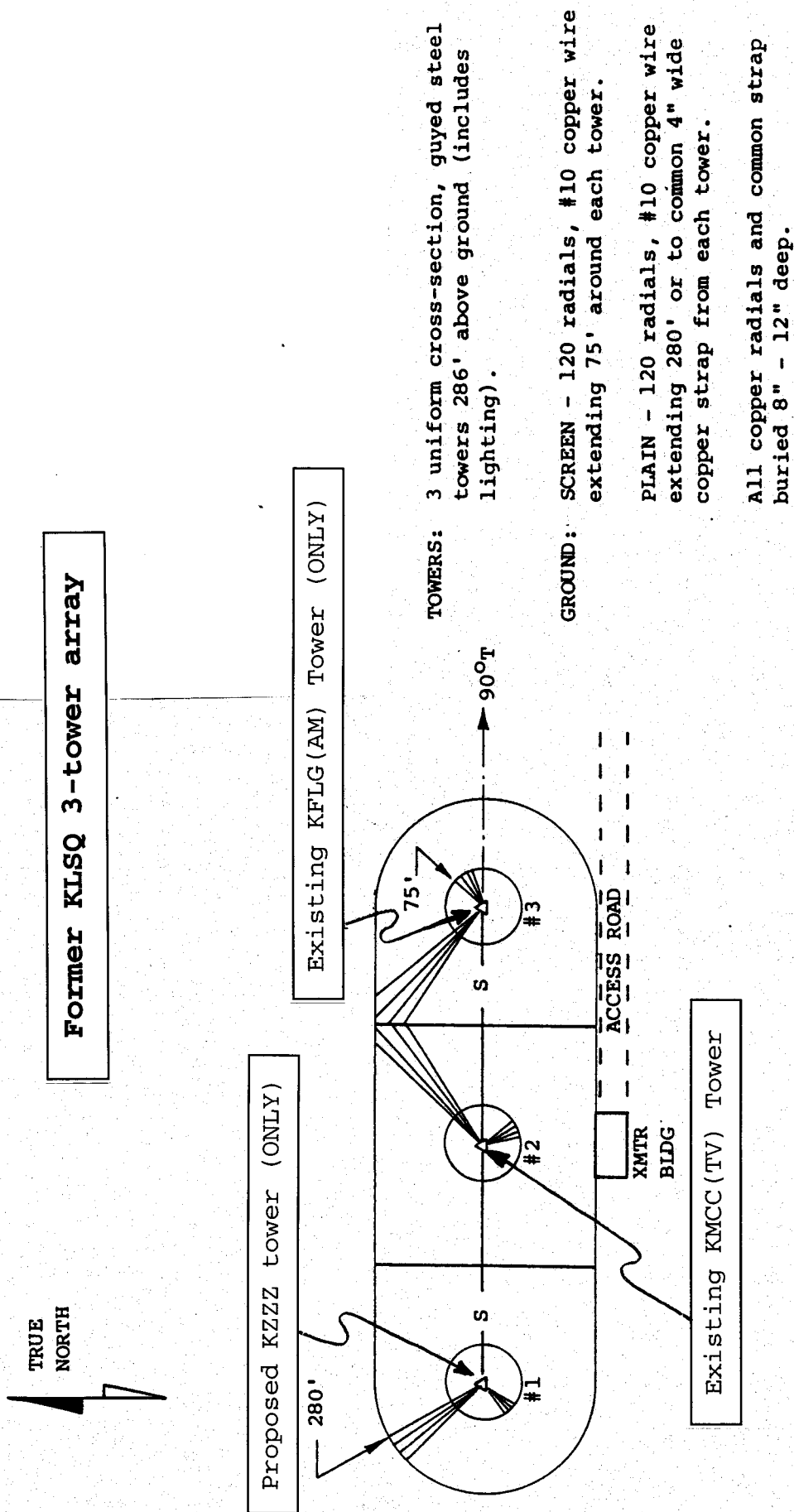
A fences restricting access is already installed at the base of the proposed tower to assure that persons on the property outside the fenced area will not be exposed to radiofrequency field levels in excess of those recommended by ANSI. Using Figures 2 and 3 of Supplement A to OET Bulletin 65, the worst-case interpolated distance at which the electric and magnetic fields would fall below ANSI guidelines is less than 1 meter. An existing concrete structure currently restricts access to the base of the proposed tower to a minimum of 1.4 meters (5 feet). This is in compliance with the standards specified in Section 1.1307(b) for human exposure to radiofrequency radiation.



Jonathan N. Edwards

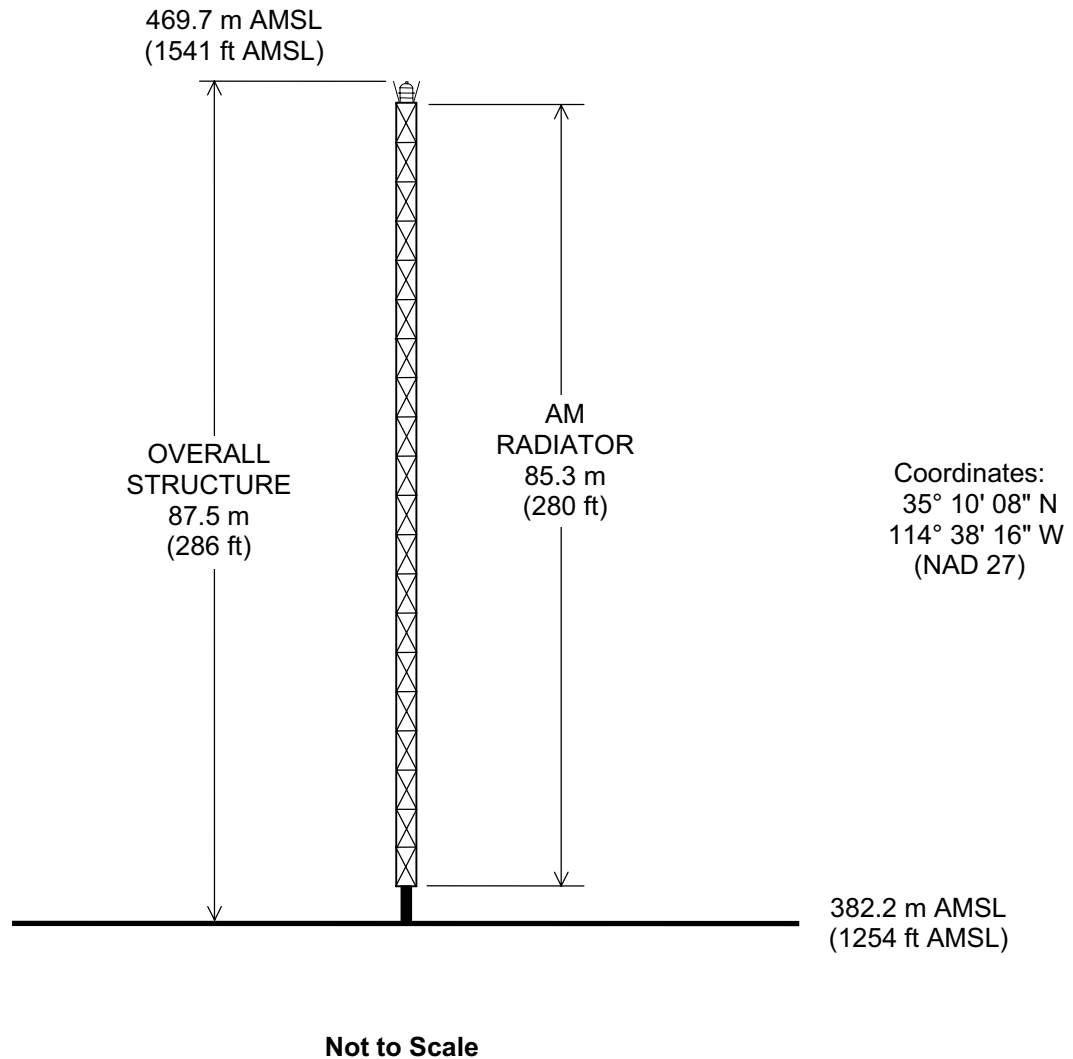
du Treil, Lundin & Rackley, Inc.
201 Fletcher Avenue
Sarasota, Florida 34237
941.329.6000

August 8, 2006





ASRN: 1237228



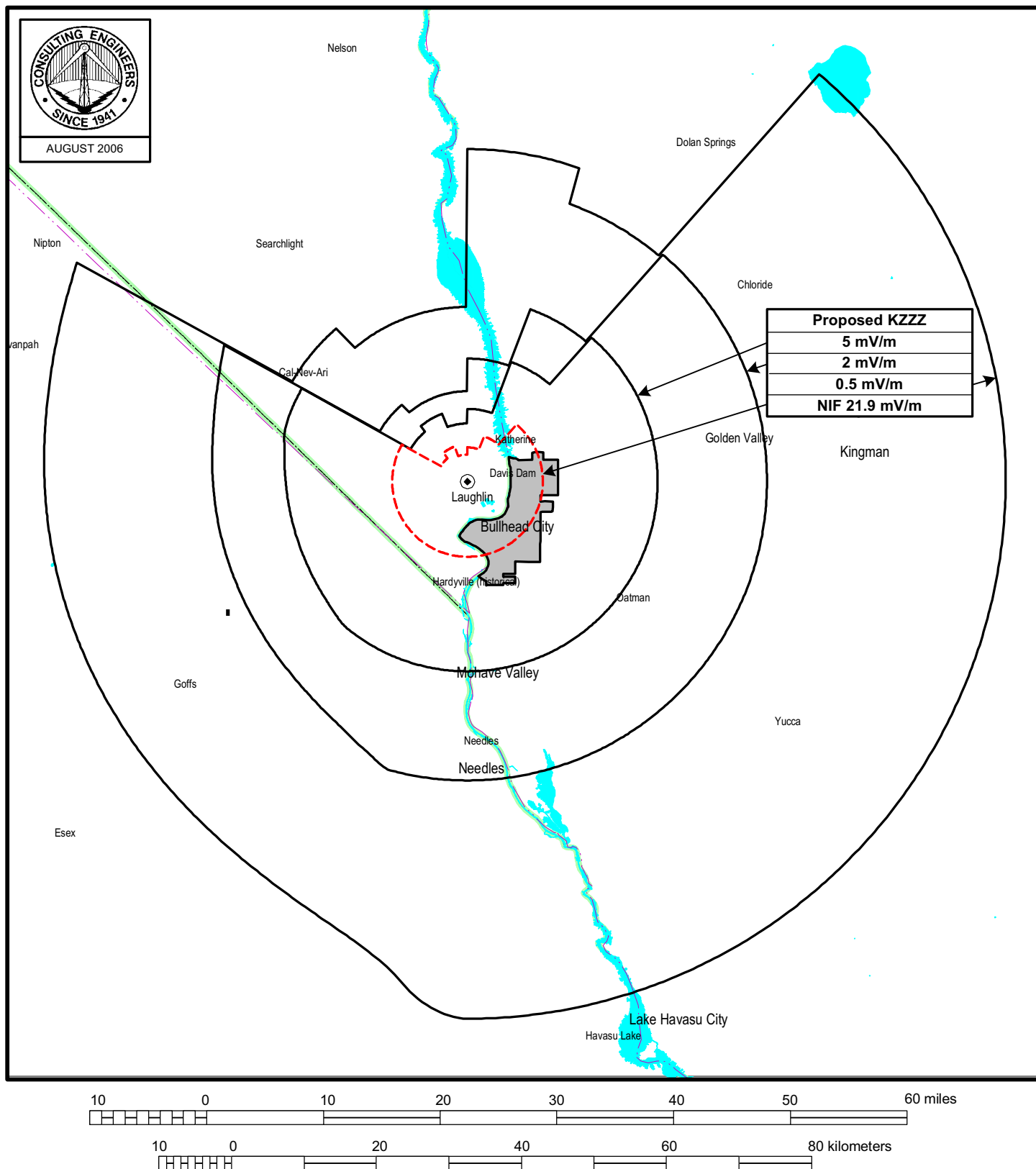
SKETCH OF ANTENNA ELEMENT

AM STATION KZZZ

BULLHEAD CITY, ARIZONA

1490 KHZ 1 KW-U ND-1

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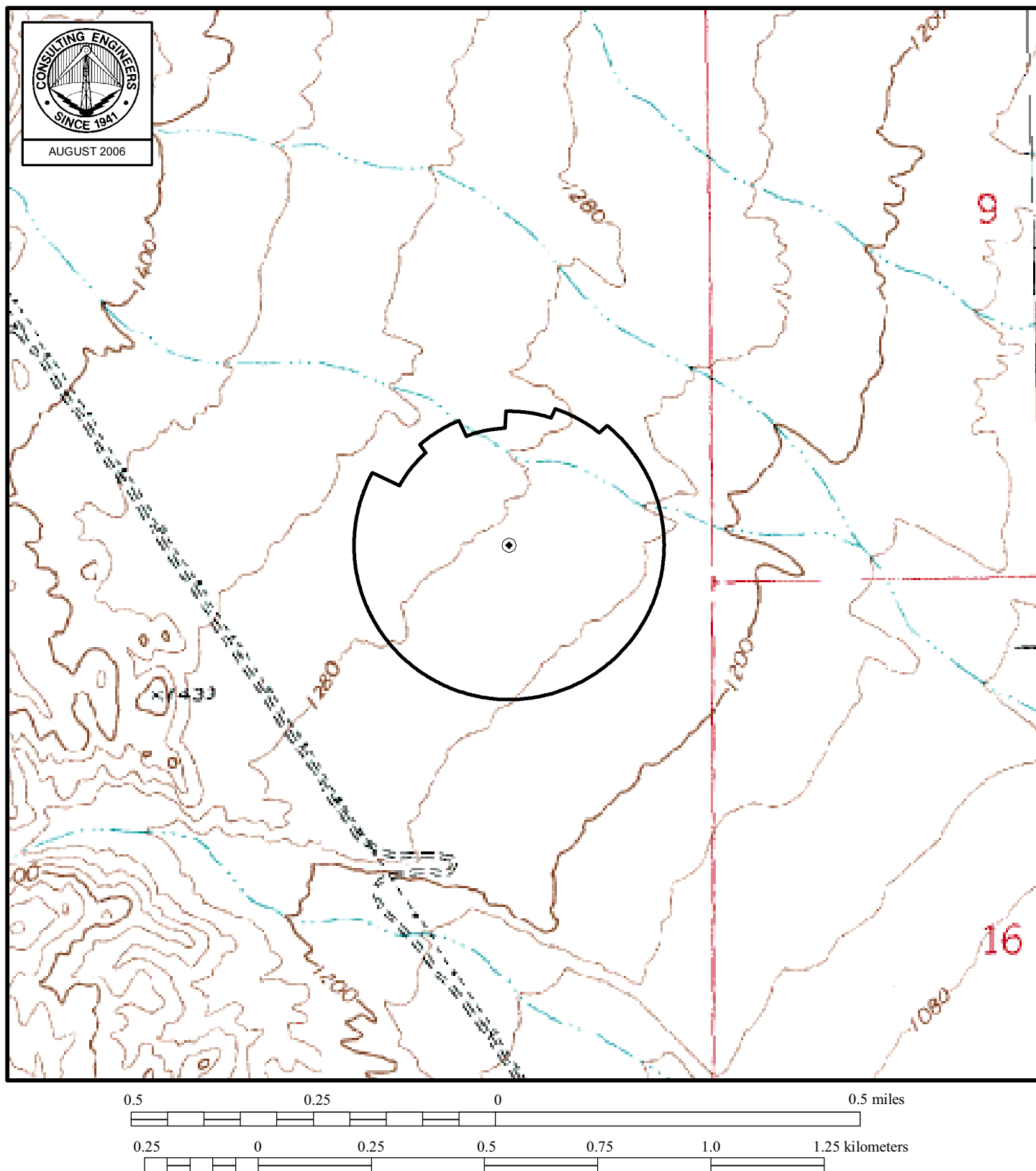
PROPOSED COVERAGE CONTOURS

AM STATION KZZZ

BULLHEAD CITY, ARIZONA

1490 KHZ 1 KW-U ND-1

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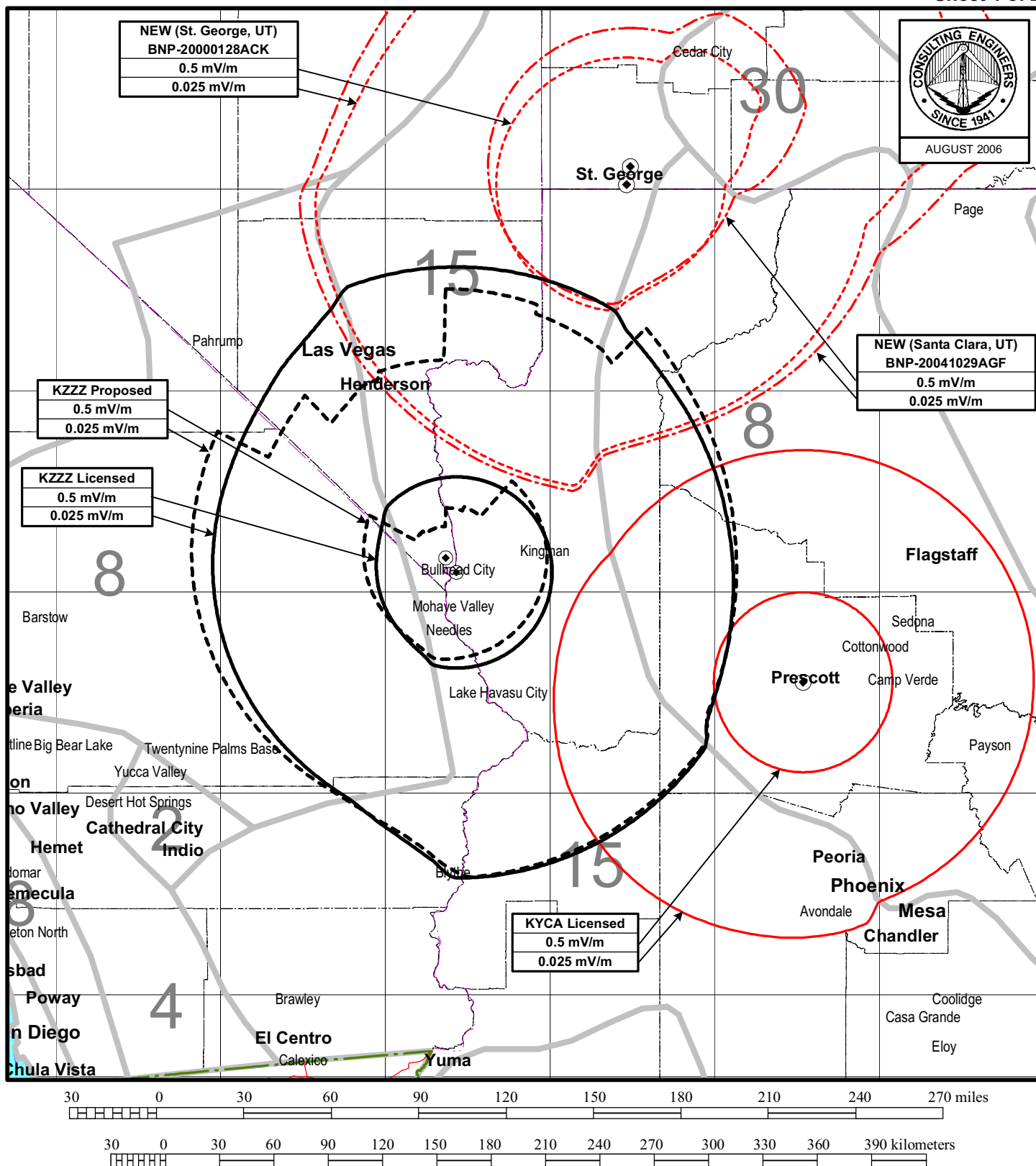


PREDICTED 1000 mV/m COVERAGE CONTOUR

AM STATION KZZZ
BULLHEAD CITY, ARIZONA
1490 KHZ 1 KW-U ND-1

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 4
Sheet 1 of 2



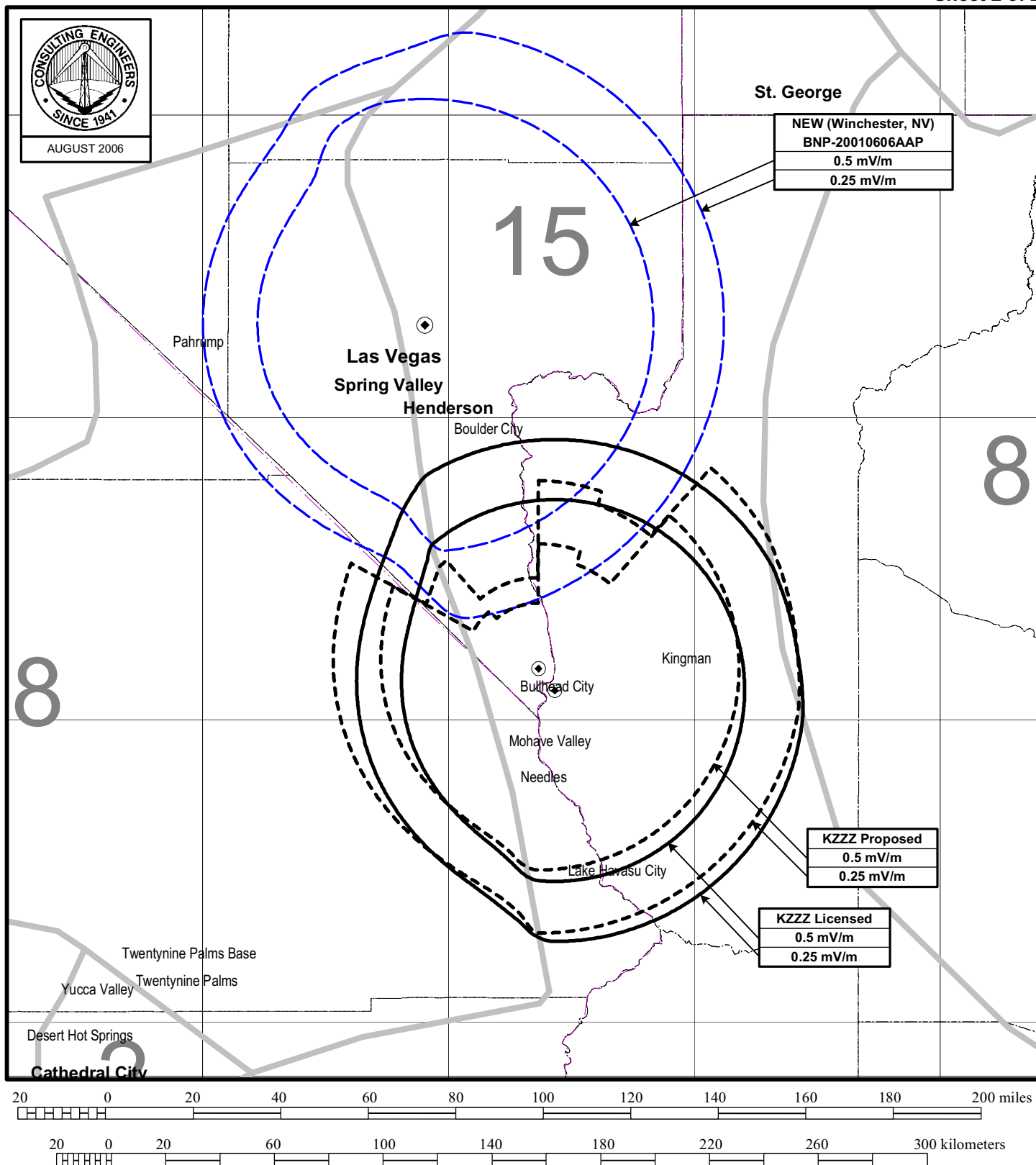
CO-CHANNEL ALLOCATION STUDY

AM STATION KZZZ

BULLHEAD CITY, NEVADA

1490 KHZ 1 KW-U ND-1

du Treil, Lundin & Rackley, Inc Sarasota, Florida



FIRST ADJACENT CHANNEL ALLOCATION STUDY

AM STATION KZZZ

BULLHEAD CITY, NEVADA

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Data Employed in Calculation of Groundwave Contours

With the exception of the proposed KZZZ operation, all groundwave contours were calculated using the appropriate directional or non-directional radiation and FCC Figure M-3 conductivity. For KZZZ, ground conductivity measurements were made on existing AM station KFLG (BL-19920414AB), which operates non-directionally with 1000 kW from an adjacent tower on the same property as the proposed KZZZ operation

Proposed KZZZ, Bullhead City, Nevada

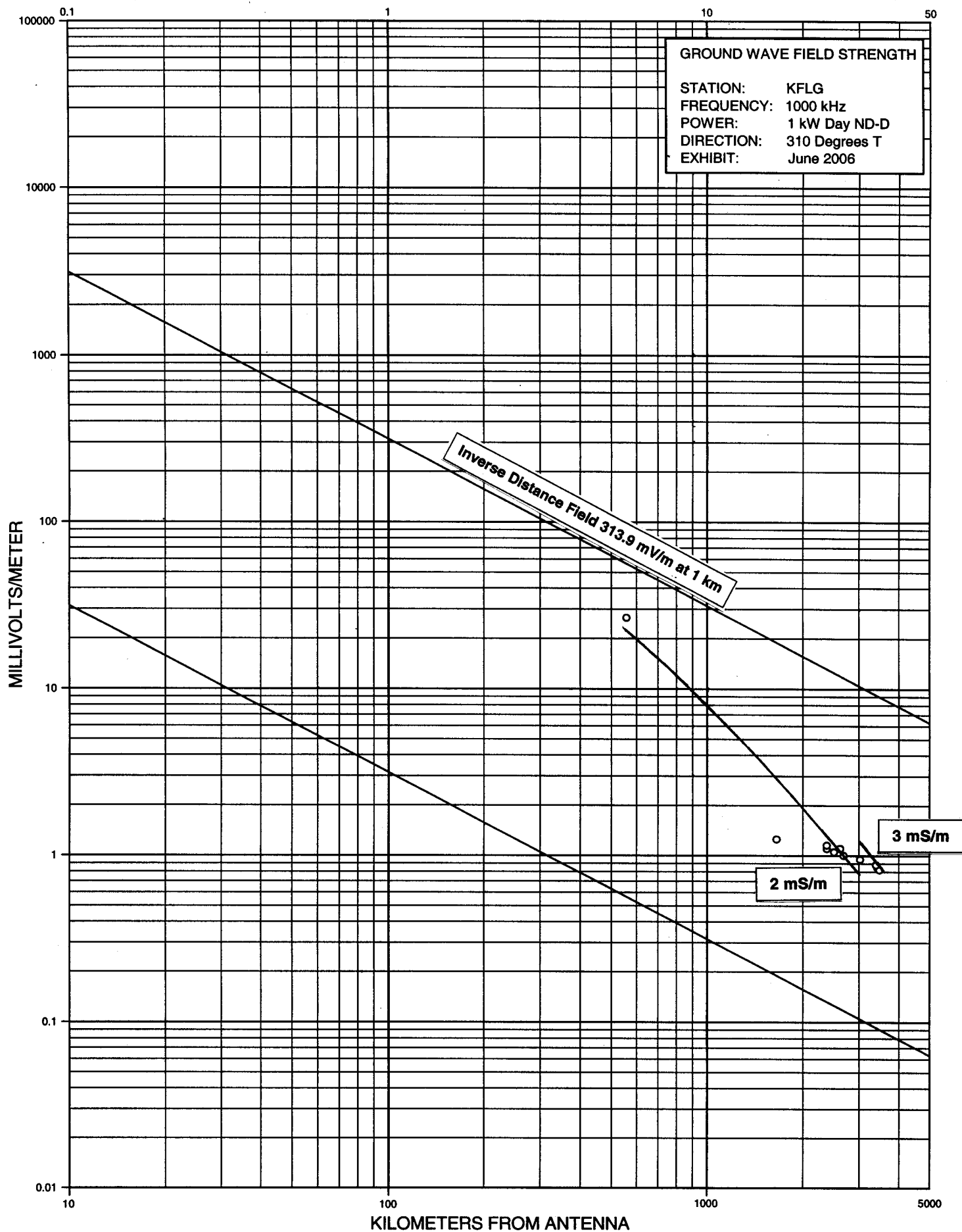
KFLZ(AM), located 0.4 km from proposed KZZZ tower

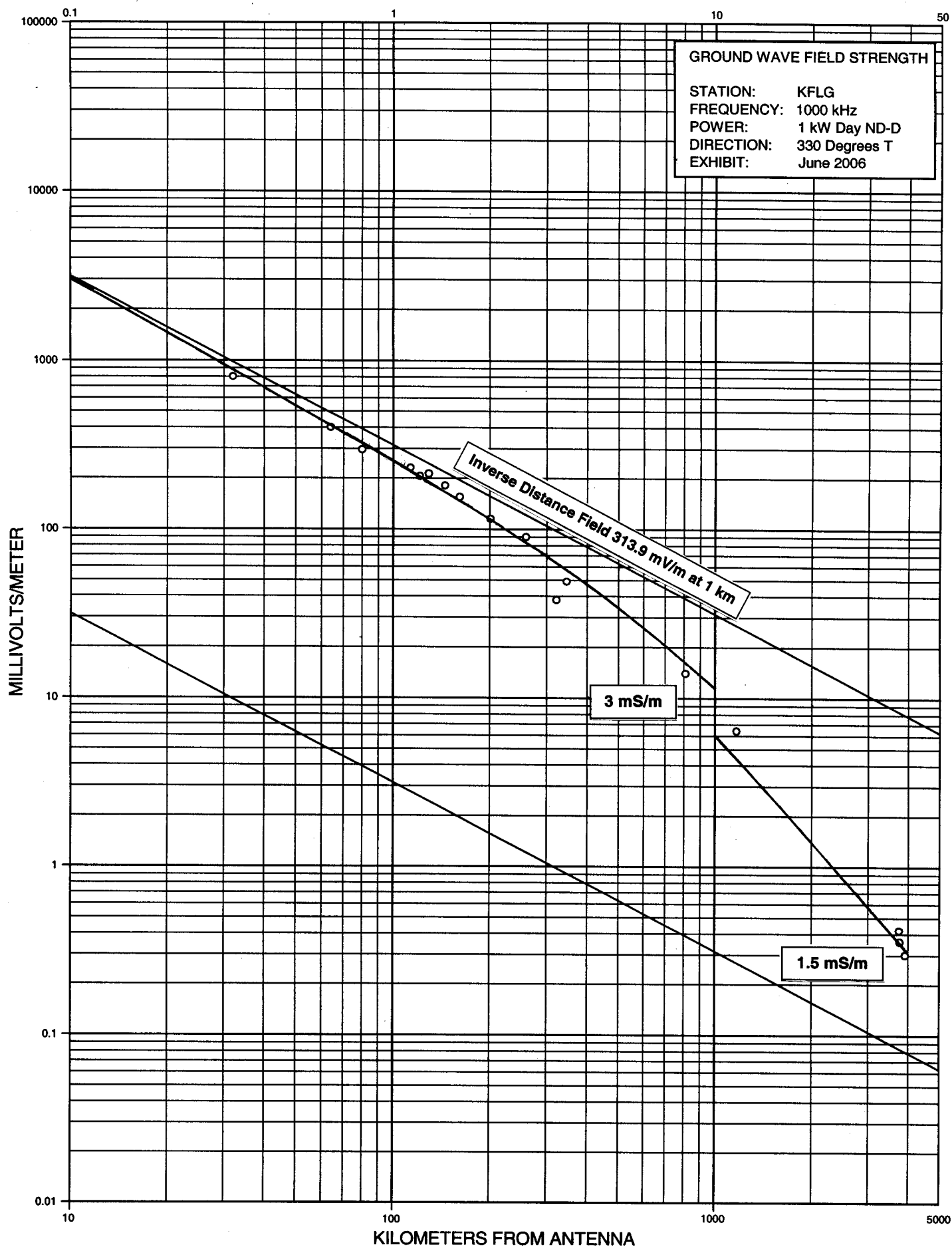
1000 kHz 1 kW ND-D

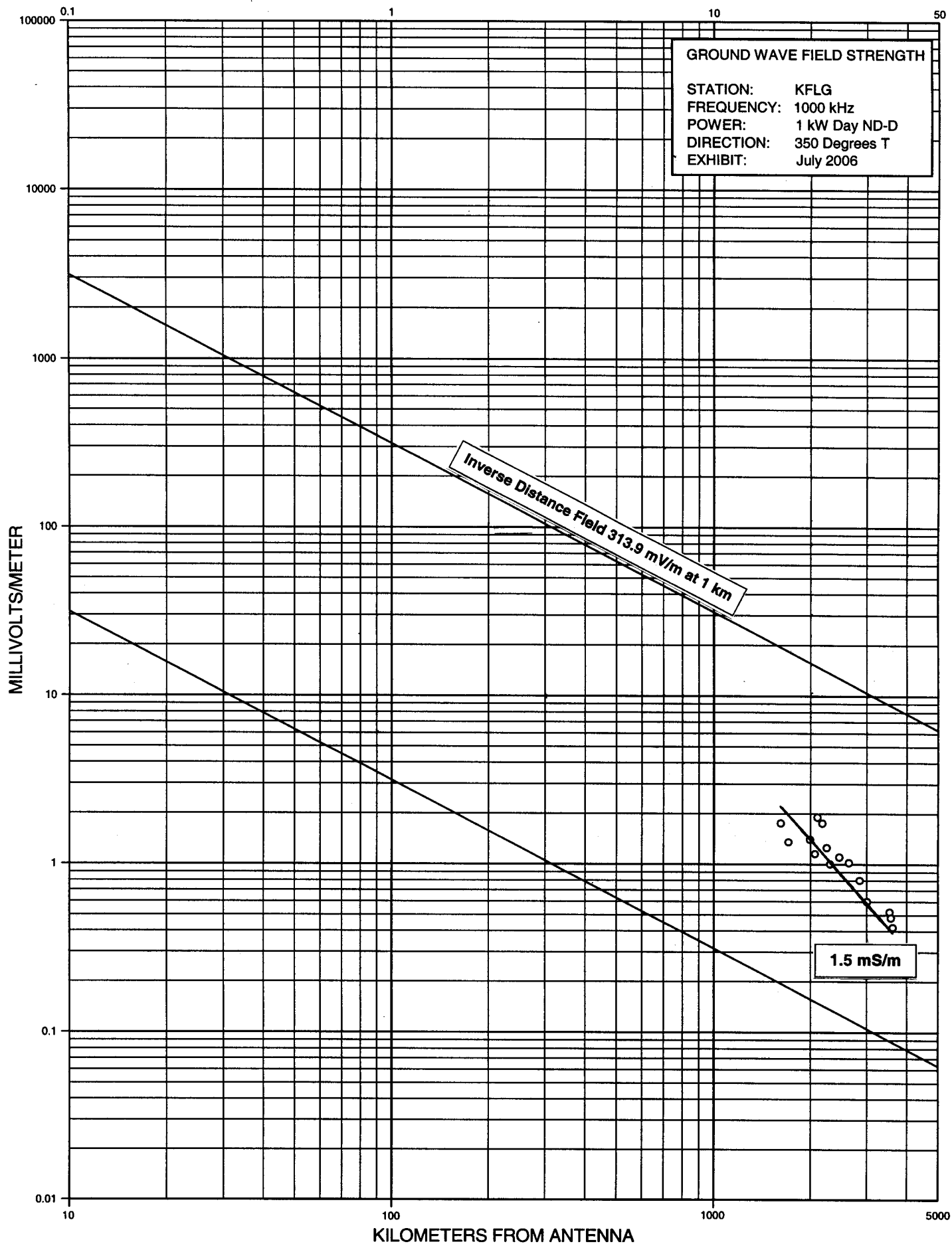
Licensed Coordinates: 35° 10' 10" N, 114° 38' 02" W

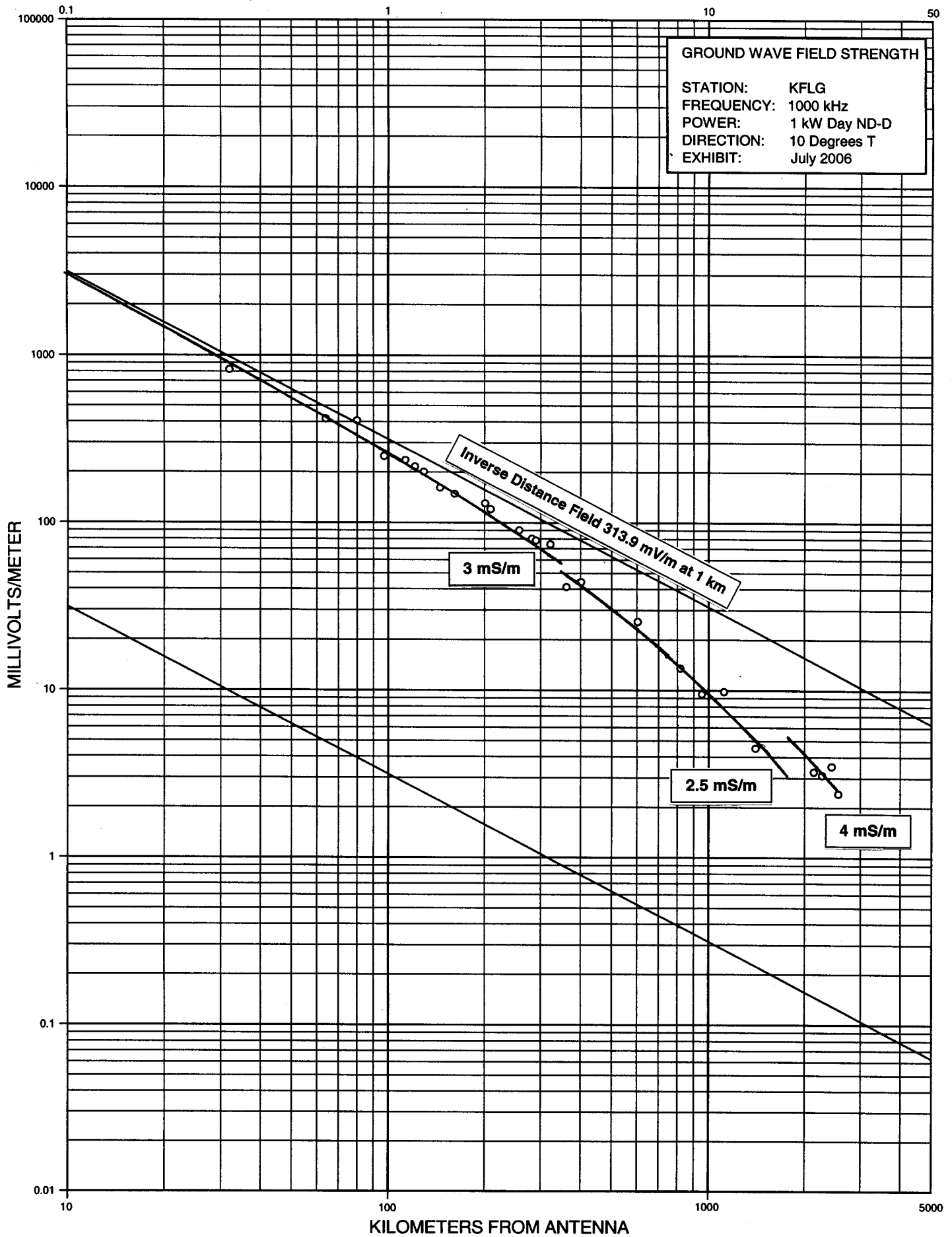
Standard pattern radiation applied along all azimuths. Measured conductivity applied +/- 10° from measured radial. FCC Figure M-3 conductivity applied beyond the extent of the measurements and on all other azimuths. Measured conductivities were obtained from graphs included in Figure 5.

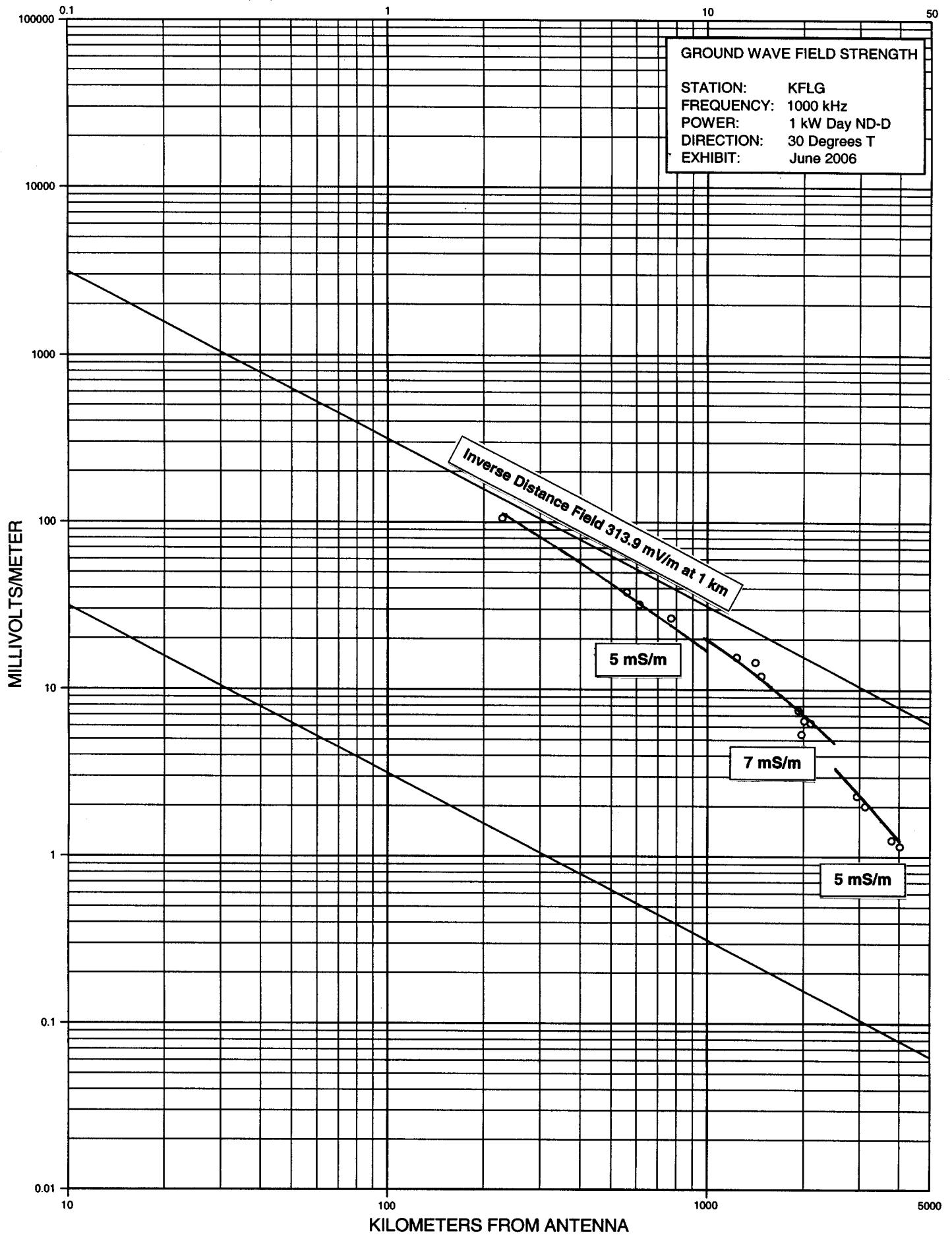
<u>Azimuth(deg.T)</u>	<u>Conductivity/End Distance(mS/m/km)</u>
310	2/30.3, 3/34
330	3/10, 1.5/39.1
350	1.5/36.2
10	3/3.4, 2.5/17.7, 4/25.6
30	5/10, 7/25.3, 5/40.2



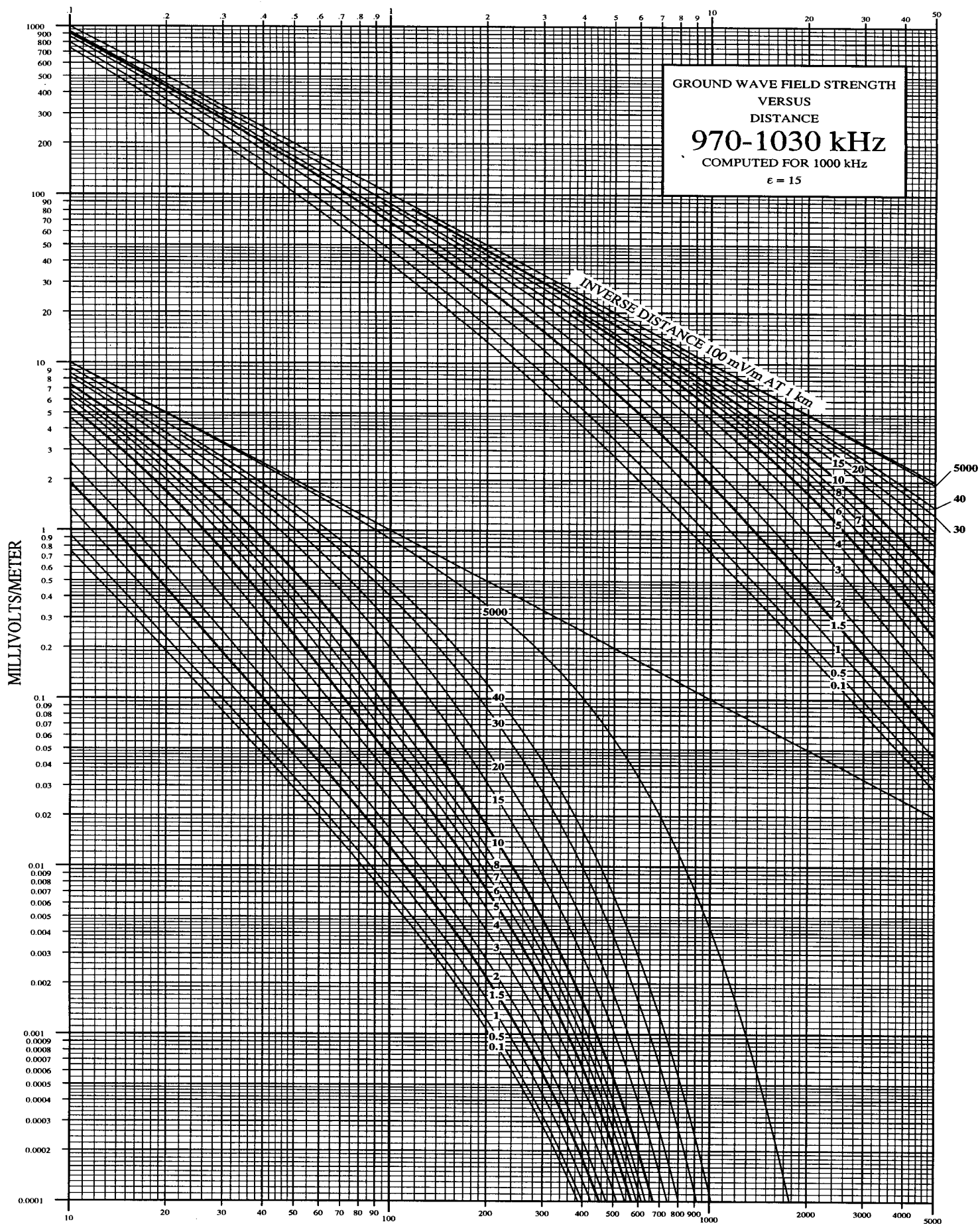








KILOMETERS FROM ANTENNA



GRAPH 12

KFLG Field Intensity Measurements 310 Degrees True

Date	Time	Dist (km)	FI mV	Notes
06-16-06	0853	5.6	26.5	
06-16-06	1010	16.6	1.25	
	1050	23.8	1.10	Approx 2 mi from Center of Loran
	1030	25.1	1.05	Approx 2.5 Miles from Loran TX
	1105	26.2	1.10	Approx 3.0 Miles from LORAN TX
	1055	26.9	1.00	Approx 3.5 Miles from LORAN TX
	1155	23.8	1.15	
	1230	30.3	0.95	
	1250	34.3	0.85	
	1258	34.8	0.82	
	1254	34.0	0.88	

KFLG Field Intensity Measurements 330 Degrees True

Date	Time	Dist (km)	FI (mv)	Notes
6-15-06	1530	0.32	800	
	1534	0.64	400	
	1537	0.80	295	Power Lines Cross Radial
	1542	1.1	230	At 0.60 Miles
	1544	1.2	205	
	1546	1.3	212	
	1550	1.5	181	
	1553	1.6	155	
	1556	2.0	115	
	1700	3.2	38	In canyon
	1710	3.5	49.0	South Side SR-164
6-17-06	0849	2.6	90.0	SR 164 Northern side of hwy
	0902	8.1	14.0	
	0911	11.7	6.40	
6-16-06	1356	37.5	0.42	
	1353	37.7	0.36	
	1348	39.1	0.30	

KFLG Field Intensity Measurements 350 Degrees True

Date	Time	Dist (km)	FI mV	Notes
6-17-06	1005	2.4	102	
7-18-06	0950	16.2	1.75	
	0955	17.1	1.35	
	1000	20.0	1.40	
7-18-06	1007	20.7	1.15	
6-24-06	1423	21.1	1.90	
	1429	21.8	1.75	
	1438	22.5	1.25	
	1443	23.1	1.00	
	1456	24.7	1.10	
	1509	26.4	1.02	
	1532	28.6	0.80	
	1615	30.1	0.60	
6-16-06	1419	35.4	0.52	
	1415	35.7	0.48	
	1425	36.2	0.42	

KFLG Field Intensity Measurements 10 Degrees True

Date	Time	Dist (km)	FI mV	Notes
06-15-06	17:18	0.32	820	
	17:12	0.64	415	
	17:16	0.8	405	
	17:08	0.97	248	
	1706	1.1	235	
	1704	1.2	215	
	1700	1.3	200	
	1656	1.5	161	
	1652	1.6	148	
	1646	2.0	130	
	1642	2.1	120	
	1742	2.6	90	Gully north side of SR 164
	1738	2.8	80	
	1735	2.9	78	
	1730	3.2	74	
6-17-06	1025	3.6	41	
	1035	4.0	44	
7-18-06	1051	6.0	25.5	
	1047	8.2	13.5	
	1039	9.5	9.50	
	1035	11.2	9.80	
	1028	14.1	4.50	
Lake	Mohave	No	Readings	Taken on Water
	1023	21.4	3.25	
	1021	2.7	3.10	
	1017	24.4	3.50	
	1012	25.6	2.40	

KFLG Field Intensity Measurements 30 Degrees True

Date	Time	Dist (km)	FI mV	Notes
6-17-06	0835	2.29	105	
	1040	5.6	38	
	1042	6.1	32	
	1052	7.7	26.5	
	1211	12.4	15.5	
	1231	14.2	14.5	
	1236	14.8	12.0	
	1303	19.3	7.50	
	1306	19.7	5.40	
	1309	20.1	6.50	
	1316	21.1	6.30	
	1357	29.5	2.30	
	1403	31.2	2.00	
	1440	37.9	1.25	
	1455	40.2	1.15	

SITE PHOTOGRAPHS

NORTH



NORTHEAST



EAST



SOUTHEAST



SOUTH



SOUTHWEST



WEST



NORTHWEST

